Impact of Acculturation, Education, and Birth Origin on Smoking Among Adult Male Los Angeles County Residents of Mexican Ancestry

MARK D. WEBER, PhD¹, DONNA SZE, MPH¹, and PAUL SIMON, MD, MPH²

- 1. County of Los Angeles Department of Public Health, Tobacco Control & Prevention Program
- 2. County of Los Angeles Department of Public Health, Division of Chronic Disease & Injury Prevention

>BACKGROUND

- Acculturation in the U.S. may lead to the adoption of unhealthy behaviors such as cigarette smoking.
- Males of Mexican ancestry represent over 18% (nearly 2 million people) of the total population of Los Angeles County; hence the potential public health impact of acculturation is substantial.

>OBJECTIVES

- To investigate the effects of acculturation on cigarette smoking among males of Mexican ancestry.
- To assess whether the effects of acculturation on cigarette smoking apply to both Mexican- and California-born males.
- To identify demographic characteristics that may moderate the relationship.

>METHODS

- A population-based random-digit-dial telephone health survey was conducted in 2003 among Los Angeles County adult residents aged 18 years and older.
- Of the 8167 survey participants, 897 were males of Mexican ancestry (523 Mexican-born and 374 California-born) and constituted the analysis sample (Table 1).
- A psychometrically validated (Marin et al., 1987) five item (e.g., languages read and spoken at home) five point Likert-type scale ranging from "Only Spanish" to "Only English" was used to assess acculturation.
- Mean scores on the five items were dichotomized at the median point (2.6) to form "high" and "low" acculturation categories.
- Separate logistic regression models were conducted for Mexican- and California-born males, with and without interaction effects.
- The outcome variable was current cigarette smoking and the primary independent variable was acculturation, with age, education, and poverty level included as covariates.

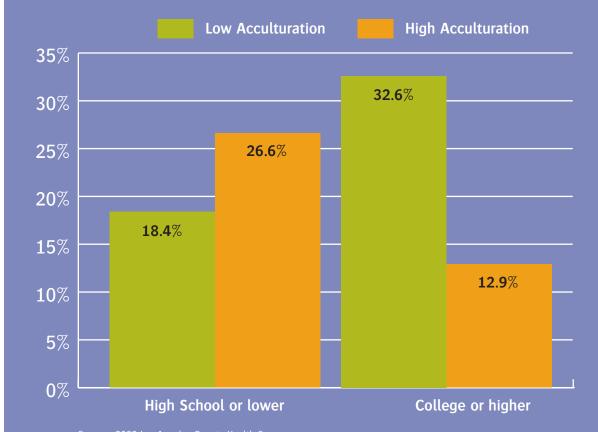
>RESULTS

- No significant effects of acculturation were found in the main effects (no interactions) models.
- However, significant interactions were found between acculturation and education for Mexican- and California-born males:
 - Among those with a high school education or lower, increased smoking prevalence was significantly associated with high versus low acculturation for Mexican- (26.6% versus 18.4%) and California-born (20.1% versus 10.5%) males (Figure 1/Figure 2).
 - Among those with a college education or higher, decreased smoking prevalence was significantly associated with high versus low acculturation for Mexican- (12.9% versus 32.6%) and California-born (14.9% versus 53.5%) males (Figure 1/Figure 2).

>CONCLUSIONS

- Findings suggest that culturally relevant smoking prevention interventions targeted to Mexican- and California-born males living in Los Angeles County are needed.
- Ideally, the intervention strategies should consider the education level of the participants.
- Highly stratified analysis led to wide confidence intervals in the estimates of the interaction effect between acculturation and education; hence findings should be considered preliminary and replicated in larger samples.
- Future research is needed to understand the underlying causal processes by which acculturation and education interact to influence cigarette smoking.







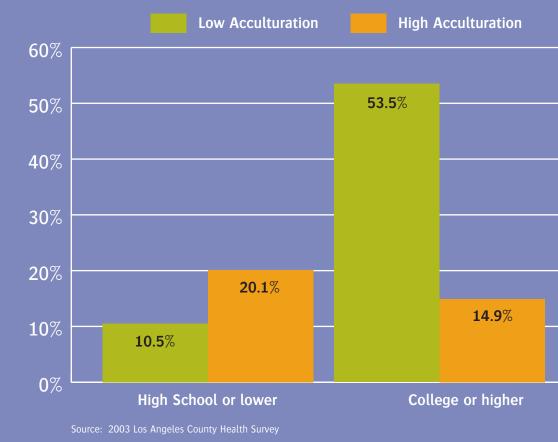




Table 1. Demographic Characteristics of 2003 Los Angeles County Health Survey among Adult Males of Mexican Ancestry

	Mexican-born	California-born
Sample Size	523	374
Acculturation Status		
Low	81.4%	8.3%
High	18.6%	91.7%
Education		
Less than High School	60.5%	16.8%
High School	25.3%	34.0%
Some College/Trade School	10.0%	32.1%
College/Post Graduate Degree	4.2%	17.1%
Age Group		
18 – 24	13.6%	28.6%
25 – 29	14.9%	16.1%
30 – 39	33.5%	22.7%
40 – 49	21.4%	14.7%
50 – 59	9.8%	10.4%
60 – 64	3.4%	2.4%
65+	3.4%	5.1%
Federal Poverty Level		
0% – 99%	42.4%	15.0%
100% - 199%	37.1%	27.5%
200% – 299%	13.2%	18.2%
300% or above	7.3%	39.3%



Source: 2003 Los Angeles County Health Survey